## NOTES ON THE GENUS BUPRESTIS LINNE IN CALIFORNIA.

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This genus is represented in California by seven species and three varieties if the numbering of Henshaw's catalogue be taken as gospel. *B. fasciata* var. *langii* LeConte is, however, nothing but the female of the western phase of *B. fasciata* Fabricius. I have before me a specimen of *langii* in which the spots are identical with those of western *fasciata*, although of an ivory color instead of yellow.

Three of our species are quite rare, two of these exceedingly

so, while the rest are either common or moderately so.

The majority of the species work upon conifers, while two are known to bore in broad-leafed trees. Variety *langii* is also under suspicion of working on the latter, as it has been taken resting upon the foliage of alders and willows.

Buprestis aurulenta Linn., 14–21 mm. in length, is quite common in the Sierras and works in practically all of the pines as well as Douglas fir, western red cedar, and spruce. It is also found, but less commonly on the Coast belt, a specimen sent to me by Mr. Freeborn of the Medical Parasitology department of the University, having emerged in Berkeley. Specimens in my collection were taken at Yosemite, Donner Lake, Independence Lake, Calistoga, St. Helena, and Siskiyou County, the dates ranging from June 8 to July 30.

Buprestis laeviventris LeConte, 16–22 mm. in length, is taken commonly throughout the Sierras, especially in the north, and works on yellow, lodgepole, digger and sugar pines. Specimens in my collection were taken at Eureka, St. Helena, Mokelumne Hill, Sisson, Donner Lake, and Truckee between June 18 and September 2.

Buprestis maculiventris var. subornata LeConte, 17–20 mm. in length is taken in the Sierras, in Northern California particularly, where it bores in Douglas fir, and has been taken on the foliage of western yellow pine. It is moderately common in some localities. Specimens in my collection were taken at Donner Lake and in Oregon between June 10 and July 3.

Buprestis maculiventris var. rusticorum Kirby, 16–23 mm. in length, is found commonly in Northern California and breeds in yellow pine, Douglas, alpine, and white fir. Specimens in my collection were taken at Weed, St. Helena, Tahoe Tavern and Donner Lake, between May 25 and July 21.

Buprestis adjecta LeConte, 12–19 mm. in length, is scarce as a rule, and is found in the higher Sierras breeding in yellow and other alpine pines, probably also Jeffrey. Specimens in my collection were taken at Donner and Independence Lakes, July 3–15.

Buprestis fasciata Dejean, 10–19 mm. in length, is taken in the Sierras of northern California and is known to bore in Douglas fir, while the female, usually known as var. langii LeConte, has been taken by myself, Dr. E. C. Van Dyke and others resting on the foliage of alder and willow. Specimens in my collection were taken at Donner Lake, Tahoe Tavern, Muir Woods and Willits, between June 10 and July 21.

Buprestis gibbsii LeConte, 12–21 mm. in length, is taken very rarely in California. It has been taken from oak by Mr. E. Leach of Oakland and by Dr. E. C. Van Dyke. This past summer I removed adults from their pupal chambers in cottonwood at Oro Grande, San Bernardino County. Specimens in my collection were taken at Oro Grande and in Trinity County, between May 18 and July 29.

Buprestis confluens Say, 15–16 mm. in length, is taken exceedingly rarely in California, in the Great Basin and Tahoe regions. It works on poplars. Specimens in my collection were taken at Tahoe Tavern and in Colorado, July 1–22.

Buprestis connexa Horn, 14–15 mm. in length, is taken extremely rarely in Washington, Oregon and the eastern base of the Sierras in California. It works on alpine trees, having been taken from western yellow pine. One specimen in my collection taken at Donner Lake, July 7.

I have tried trapping by sawing up fresh pine wood at several localities, but without success, except at Donner Lake in 1915, between July 1 and 15. In three days I collected from a pile of yellow pine chunks 64 specimens of Buprestis, as follows: 41 aurulenta, var. rusticorum 20, adjecta 2, connexa 1. These three days were separated over several weeks, as I returned to

this pile to collect only occasionally. Several hundred Chrysobothris, mostly *C. caurina*, were also taken at this wood.

Thus California has within her borders over one-third of the species of Buprestis north of Mexico, together with two varieties of an eastern species. One of these species, *B. fasciata* Dej., it is true is common to both east and west, but I think it may be said without fear of contradiction that California has a greater number of species of this genus than any other state in the Union.